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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,798	07/24/2000	Paul C Coffin	10001664-1	6517

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EXAMINER

WATKO, JULIE ANNE

ART UNIT PAPER NUMBER

2652

DATE MAILED: 06/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PAK

# Office Action Summary

Application No.

09/624,798

Applicant(s)

COFFIN ET AL.

Examiner

Julie Anne Watko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4-6, 10-11, 13-16 and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dankman et al (US Pat. No. 5491609).

Due to the similarity of apparatus claim scope, the independent apparatus claims will be treated together. Because the currently pending method claim is not patentably distinct from the apparatus claims, the method claim will be treated with the independent apparatus claims.

As recited in claims 1, 10, 14 and 20, Dankman et al show a reconfigurable cartridge processing module (“electronic platform”, see col. 2, line 27) for use in a data storage system (“computer”, see col. 2, line 36), comprising: a frame 100 having a plurality of sets of mounting locations (310, 320 and 330; see Fig. 3) provided thereon so that said frame defines a first component configuration (see col. 6, lines 1-9, for example) and a second component configuration (see col. 6, lines 10-22, for example), the first component configuration comprising: a first cartridge receiving device 600 mounted to a first set 320 of the plurality of sets of mounting locations provided on said frame so that said first cartridge receiving device is located at a first position (at 320) within said frame; and a second cartridge receiving device 600 mounted to a second set 330 of the plurality of sets of mounting locations provided on said frame so that said second cartridge receiving device is located at a second position (at 330) within said

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frame, said first and second cartridge receiving devices together occupying a volumetric space within said frame (“docked at platform 100, **each to one of the bays 310, 320, and 330**”, see col. 6, lines 8-9, emphasis added); the second component configuration comprising a third cartridge receiving device (“external module approximately twice the width W of module 600”, see col. 6, lines 14-15) mounted to a third set (320 and 330) of the plurality of sets of mounting locations provided on said frame, said third cartridge receiving device occupying substantially the same volumetric space (“docked at the platform 100 **using the bays 320 and 330**”, see col. 6, lines 15-16, emphasis added) within said frame as is occupied by said first and second cartridge receiving devices in said first component configuration.

As recited in claim 10, in addition to the above teachings, Dankman et al show the second position 330 being located adjacent the first position 320 so that said second cartridge receiving device is located alongside (see Fig. 3) said first cartridge receiving device; said third cartridge receiving device in said second component configuration substantially replacing said first and second cartridge receiving devices in said first component configuration and vice-versa, so that a volumetric space (320 and 330) occupied by said first and second cartridge receiving devices 600 in said first component configuration is substantially occupied by said third cartridge receiving device (twice the width of 600) in said second component configuration and vice-versa.

As recited in claims 2 and 11, Dankman et al show that said first cartridge receiving device 600 comprises a half-width (see arguments below) cartridge (“floppy drives”, see col. 1, line 27) read/write device 600.

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As recited in claims 4 and 13, Dankman et al show that said third cartridge receiving device comprises a full-width (see arguments below) cartridge ("floppy drives", see col. 1, line 27) read/write device (see col. 6, lines 10-17).

As recited in claims 5 and 15, Dankman et al show that the second position 330 is located adjacent (see Fig. 3) the first position 320 so that said second cartridge receiving device 600 is located adjacent said first cartridge receiving device 600 when said frame 100 is in the first component configuration.

As recited in claims 6 and 16, Dankman et al show that the second position 330 is located alongside (see Fig. 3) the first position 320 so that said second cartridge receiving device 600 is located alongside said first cartridge receiving device 600 when said frame 100 is in the first component configuration.

As recited in claims 17 and 19, Dankman et al show cartridge read/write means ("floppy drives", see col. 1, line 27) for reading data from and writing data to said at least one data cartridge.

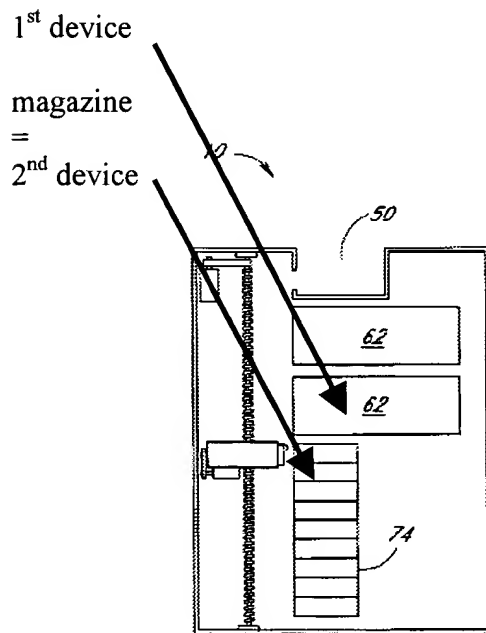
3. Claims 1, 3, 7-10, 12, 14 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kersey et al (US Pat. No. 5870245).

Due to the similarity of apparatus claim scope, the independent apparatus claims will be treated together. Because the currently pending method claim is not patentably distinct from the apparatus claims, the method claim will be treated with the independent apparatus claims.

It is noted by the Examiner that the interpretation of Kersey et al differs (as illustrated in the following annotated figures) from that used in the rejection of the originally filed claims (see paper no. 3, mailed January 29, 2002).

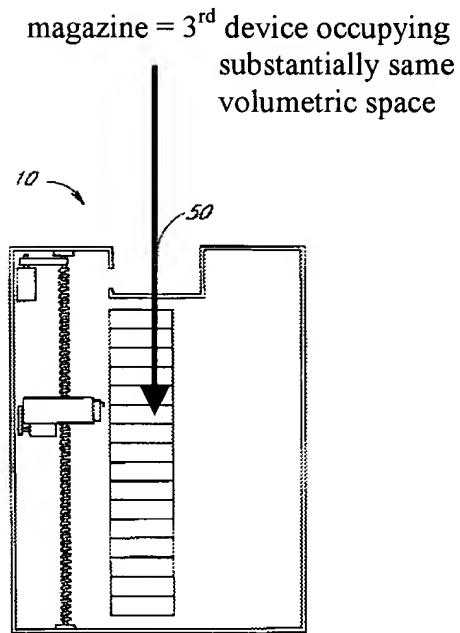
**Kersey et al Fig. 4b (annotated)**

**= first configuration**



**Kersey et al Fig. 4c (annotated)**

**= second configuration**



See arguments below regarding independent claims 1, 10, 14 and 20.

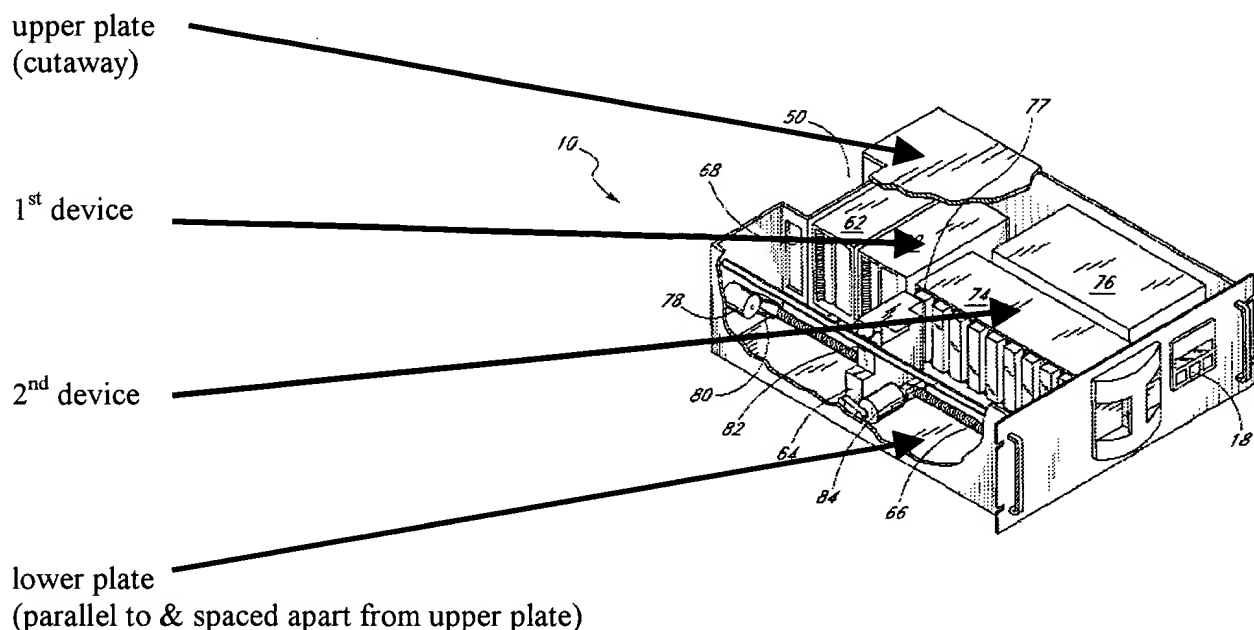
As recited in claims 3, 12 and 18, Kersey et al show that said second cartridge receiving device 74 comprises a cartridge storage magazine.

As recited in claim 7, Kersey et al show that said frame comprises a lower plate and an upper plate (see Fig. 5, annotated), the lower plate and the upper plate being positioned in generally parallel, spaced-apart relation, and wherein the plurality of sets of mounting locations are provided on the lower and upper plates of said frame.

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As recited in claim 8, Kersey et al show that said first 62 and second 74 cartridge receiving devices are located substantially between (see Fig. 5, annotated) the upper and lower plates of said frame when said frame is in the first component configuration.

**Kersey et al Fig. 5 (annotated)**



As recited in claim 9, Kersey et al show that said third cartridge receiving device (magazine, see above) is located substantially between the upper and lower plates of said frame when said frame is in the second component configuration.

### ***Response to Arguments***

4. Applicant's arguments filed April 28, 2002, have been fully considered but they are not persuasive.

Regarding Kersey et al: Applicant's arguments have been fully considered; however, they are moot in view of the different interpretation of Kersey et al applied in this action.

On page 15, last paragraph, Applicant argues that “claim 1 is amended to state that first and second cartridge receiving devices ‘together occupy a volumetric space within the frame’ and that the third cartridge receiving device occupies ‘substantially the same volumetric space within said frame as is occupied by said first and second cartridge receiving devices in said first component configuration.’ These elements and limitations are not disclosed in or suggested by Kersey.” The Examiner has considered this argument fully and asserts that Kersey et al, Figs. 4b-4c, meet these limitations. It is noted by the Examiner that the limitation “occupying substantially the same volumetric space” in the independent claims has been interpreted broadly; for example, spaces being occupied may overlap, but need not be identical in shape, nor in size.

Regarding all other arguments: Applicant’s arguments have been fully considered; however, they are moot in view of the new grounds of rejection.

Regarding the limitations “half-width” and “full-width”: On page 12, 1<sup>st</sup> paragraph, Applicant explicitly admits that these limitations “merely serve to refer to the **relative** sizes of certain drive types.” Applicant further admits that “the terms ‘full-width’ and ‘half-width’ do not seek to define or conform to any particular standard that may change over time, but rather refer to the **relative** sizes between the two types of drives.” It is clear, in view of these admissions, that the modules of Dankman et al satisfy the limitations “half-width” and “full-width” insofar as the third cartridge receiving device is “approximately twice the width W of module 600” (see Dankman et al, col. 6, lines 14-15). If the third cartridge receiving device is “full-width” (arbitrarily), then cartridge receiving device 600 is “half-width” (relatively).



*Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ogawa et al (US Pat. No. 6016249) show a housing unit comprising a packaging case which secures disc units of different heights. Jiang (US Pat. No. 6325353) shows a carrier for disk drive hot swapping comprising frame 700. Kaczeus et al (EP 0653759 A2) shows a hot-swappable multi-cartridge docking module, and discloses "a single cartridge per half-height bay" (see col. 2, lines 55-56) and "multiple thin disk drives within the space of a half-height bay" (see col. 3, lines 49-51). Falk (June 1990, "Large-Capacity Disks", *The Electronic Library*, v8, n3, p209-211) explicitly teaches that "half-height units will fit into the **same space** as one full-height unit" (see p. 209, col. 1, emphasis added). Zulich (October 1997, "The RAID Kit That Didn't",

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*Windows Sources*, v5, n10, p121-122) shows a redundant array of inexpensive disks wherein "You don't need to match drive size or manufacturer" (see 1<sup>st</sup> page, 4<sup>th</sup> paragraph).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (703) 305-7742.

The examiner can normally be reached on Mon-Thurs 10:30-8 and alternate Fri 9:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



JAW

June 17, 2002



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6/19/02